

WHAT IS CLAIMED IS:

1 1. A method for providing a subscriber with a requested level of service on a packet  
2 network, said method comprising:

3 storing a subscription level of service for said subscriber;

4 receiving a message from a user of said packet network requesting said  
5 requested level of service, said requested level of service different from said  
6 subscription level of service;

7 responsive to said receiving of said message, allocating resources of said packet  
8 network corresponding to said requested level of service; and

9 receiving data from, and transmitting data to, said subscriber using said  
10 resources allocated corresponding to said requested level of service.

1 2. The method of claim 1 wherein said message received from said user is received  
2 either directly or indirectly from said user.

1 3. The method of claim 1 further comprising:

2 prior to receiving said message from said user, allocating resources according  
3 to said subscription level of service.

1 4. The method of claim 1 wherein said message further comprises a settlement method  
2 for settling the costs for said resources allocated corresponding to said requested  
3 level of service.

1 5. The method of claim 4 wherein said settlement method allocates costs for providing  
2 said requested level of service to at least one of said subscriber and another station.

1 6. The method of claim 5 wherein said another station is a station in communication  
2 with said subscriber using said resources allocated corresponding to said requested  
3 level of service.

1 7. The method of claim 1 wherein each of said requested level of service and said  
2 subscription level of service is indicative of at least one of a type of service, a class  
3 of service, a priority of service and a bandwidth.

1 8. The method of claim 1 wherein said user is one of said subscriber and another  
2 station.

1 9. A method of enabling a subscriber to use resources on a packet network, said  
2 resources indicative of a requested level of service, said method comprising:

3 transmitting a request to said packet network indicative of said requested level  
4 of service, said requested level of service different from a subscription level  
5 service provided to said subscriber by a service subscription of said subscriber;

6 responsive to said request transmitted, receiving notification of resources  
7 allocated on said packet network, said resources corresponding to said  
8 requested level of service; and

9 transmitting data to, and receiving data from, said packet network using said  
10 resources allocated.

1 10. The method of claim 9 wherein said transmitting is responsive to a request received  
2 directly or indirectly from said subscriber.

1 11. The method of claim 9 further comprising:

2 prior to said transmitting, allocating resources of said packet network according  
3 to said subscription level of service.

1 12. The method of claim 10 wherein said request further comprises a request for settling  
2 said costs associated with said resources allocated.

1 13. The method of claim 9 wherein said request is transmitted by one of said subscriber  
2 and another station.

1 14. A method for providing communication over a packet network between a first station  
2 and a second station, said method comprising:

3 establishing a first communication connection between said first station and said  
4 second station over said packet network, said first communication connection  
5 adapted to provide a first service level;

6 establishing a second communication connection between said second station  
7 and said first station over said packet network, said second communication  
8 connection adapted to provide a second service level; and

9 modifying said first connection such that said first connection is adapted to  
10 provide said second service level.

1 15. The method of claim 14 further comprising:

2 allocating costs associated with said modifying in accordance with a settlement  
3 procedure.

1 16. The method of claim 14 wherein said modifying said first connection is responsive  
2 to receiving a message from one of said first station, said second station and a third  
3 station, said message requesting said first connection modification.

1 17. A media gateway in a packet network, said media gateway providing communication  
2 between a first station and said packet network and a second media gateway  
3 providing communication between a second station and said packet network, said  
4 media gateway adapted to:

5 allocate resources for said first station, said resources forming a first connection  
6 providing communication from said media gateway over said packet network to  
7 said second media gateway, said first connection adapted to provide a first  
8 service level;

9 transmit a request for communication with said second station, said request  
10 providing network connection information about said first connection and said  
11 first service level;

12 receive a message providing network connection information about a second  
13 connection and a second service level, said second service level associated with  
14 said second connection, said second connection providing communication  
15 between said second media gateway and said packet network;

16 modify said first connection to provide said second service level;

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transmit data received from said first station destined for said second station to  
said network address of said second media gateway using said first connection;  
and  
transmit data received from said second station destined for said first station to  
said network address of said first media gateway using said second connection.

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18. The media gateway of claim 17 further adapted to:

prior to said allocating, receiving a service request from said first station, said  
service request requesting said first level of service; and  
wherein said allocating is responsive to said service request received.

19. The media gateway of claim 17 wherein said service request further comprises a  
request for a settlement procedure for said modification of said first connection; and  
further comprising prior to said receiving confirmation, transmitting a settlement  
message requesting that costs of associating said first connection with said second  
service level be allocated according to said settlement procedure.

20. The media gateway of claim 17 wherein said media gateway and said second media  
gateway are serviced by a single media gateway controller.

21. The media gateway of claim 17 further adapted to:

receive a modification request triggered by one of said first station, said second  
media gateway, a media gateway controller, said second station and a third  
party; and  
modify said first connection responsive to said modification request.

1 22. The media gateway of claim 17 further adapted to:

2 receive a modification request from a media gateway controller; and

3 modify said first connection responsive to said modification request.

1 ~~23.~~ A media gateway controller in a data network, said media gateway controller for  
2 establishing communication between a first media gateway and a second media  
3 gateway over a packet network, said first media gateway servicing a first station and  
4 said second media gateway servicing a second station, said media gateway  
5 controller adapted to:

6 receive a request from said first media gateway, said request requesting a level  
7 of service for a connection for communication between said first media gateway  
8 and said second media gateway, an address for a second station and a first  
9 network address associated with said connection terminating at said first media  
10 gateway, said first station subscribing to a subscription level of service different  
11 from said level of service requested;

12 transmit a communication request to said second media gateway, said  
13 communication request requesting said second media gateway allocate  
14 resources for communication between said second media gateway and said first  
15 media gateway over said packet network for said connection;

16 receive from said second media gateway a network address associated with said  
17 connection terminating at said second media gateway;

18 transmit to said first media gateway a response to said request, said response  
19 indicating a level of service to be provided to said first station in view of said  
20 service level requested; and

21 said connection comprising an upstream connection for transmissions from said  
22 first media gateway to said second media gateway and a downstream  
23 connection for transmissions from said second media gateway to said first media  
24 gateway.

24. The media gateway controller of claim **23** wherein said media gateway controller  
communicates with said second MG via a second media gateway controller.

25. The media gateway controller of claim **23** wherein said service level provided for  
said upstream connection is different from said service level provided for said  
downstream connection.

26. The media gateway controller of claim **23** further adapted to:

receive a request to modify said connection, said request indicating modification  
of at least one of: said level of service of said upstream connection; said level of  
service of said downstream connection; and allocation of costs of said  
connection.

27. The media gateway controller of claim **23** wherein said first media gateway and said  
second media gateway are serviced by said media gateway controller.

28. The media gateway controller of claim **23** wherein said level of service to be  
provided is different from: said requested level of service; and said subscription level  
of service.

29. The media gateway controller of claim **23** further adapted to:

transmit to said first media gateway a message requesting modification of said  
level of service of said connection to be provided to said first station, said

modification modifying said level of service to be provided to said requested level of service.

30. A computer readable media containing software for a media gateway in a packet network, said media gateway communicating with a first station and said packet network and a second media gateway communicating with a second station and said packet network, said computer readable media adapting said media gateway to:

allocate resources to said first station, said resources forming a first communication connection providing communication between said media gateway and said packet network, said first communication connection adapted to provide a first service level;

transmit a request for communication with said second station, said request providing network connection information about said first communication connection and said first service level;

receive a message providing network connection information about a second communication connection and a second service level, said second service level associated with said second communication connection, said second communication connection providing communication between said second media gateway and said packet network;

receive confirmation of modification of said first connection, said modification adapting said first connection to provide said second service level;

transmit data received from said first station and destined for said second station using said first communication connection; and



22 transmit data received from said second station and destined for said first station  
23 using said second communication connection.

1 31. A method of allocating costs associated with providing communication between a  
2 user of a packet network and said packet network, said method comprising:

3 receiving from a station a request for a modification to a service level associated  
4 with a connection providing communication between said user and said packet  
5 network;

6 responsive to said request, modifying said service level associated with said  
7 connection;

8 receiving a settlement procedure from said station; and

9 allocating costs associated with said modifying in accordance with said  
10 settlement procedure.

1 32. The method of claim 31 wherein said station is one of said user and another station.

1 33. The method of claim 31 wherein allocating comprises:

2 transmitting said settlement procedure to a network element in said packet  
3 network, said network element responsible for collecting call detail information;  
4 and

5 receiving an acknowledgement of receipt of said settlement procedure  
6 transmitted to said network element.



